

BASIC AMERICAN FOODS

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JUL 08 2008

Department of Environmental Quality
State Air Program

BAF-RX-08-015

July 2, 2008

Messrs: Bill Rogers and Zach Klotovich
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, ID 83706

RE: Request for Administrative Permit Amendment to Basic American Foods
Air Permits for Rexburg: Tier I Permit No. T1-2008.0053 and Tier II Permit
No. T2-030515

Gentlemen,

The multiclone air emission control system for BAF's Rexburg Kipper Boiler requires repairs to continue to operate properly. BAF plans to complete the repairs between July 7 and July 21, 2008. The repairs will include replacing both tube sheets, outlet tubes, vanes, collecting tubes, and gaskets (Please see the attached file, "Multiclone_Exploded_View_&_Specs.pdf"). These repairs will essentially provide a completely refurbished multiclone system upon conclusion of the project.

BAF's multiclone system originally came with Spirocones. The Spirocones are energy saving devices that reduce the pressure drop across the multiclones without affecting the particulate capture efficiency. The manufacturer no longer makes Spirocones for the 12V size multiclones (BAF's size), due to a variety of issues (Please refer to the attached letter from Mr. Stephen Chiama of Babcock & Wilcox in the attached file, "Multiclone Operation Description.pdf"). They recommend that BAF leave out the Spirocones when we rebuild our control device, but warn us that the pressure drop under normal operation at capacity will increase by one inch of water column.

Accordingly, BAF seeks an administrative amendment to our air permits for Rexburg to change the acceptable range of operating pressures for the multiclones. Table 3.3 of the Tier I Permit and Table 3.2 of the Tier II Permit contain Compliance Assurance Monitoring (CAM) requirements for the Kipper Boiler. Line II. "Indicator Range" at Column "Indicator No. 2" (Multiclone Pressure drop) specifies the acceptable range of pressure drop as follows: "*An excursion is defined as a multiclone pressure drop less than 1.0 inches of water or greater than 5.0 inches of water.*" BAF requests an administrative change in the permits so that this box reads:

An excursion is defined as a multiclone pressure drop less than 1.0 inches of water or greater than 6.0 inches of water.

JUSTIFICATION: Under IDAPA 58.01.01.381.01 an administrative amendment includes a permit revision that:

- b. Identifies a change in the name, address or phone number of any person identified in the Tier I operating permit or provides a similar minor administrative change at the Tier I source.

And

- f. Is any other type of change that EPA and the Department have determined as part of the Part 70 program to be similar to those in Subsections 381.01.a. through 381.01.d.

Since the modification to leave out the Spirocones will not affect the capture efficiency of the multiclones, but will affect the acceptable range of pressure drops across the multiclones, BAF believes our request is consistent with the intent of the IDAPA rules regarding an administrative amendment. Please contact me at (208) 785-8572 if have any questions or need further information.

Sincerely,

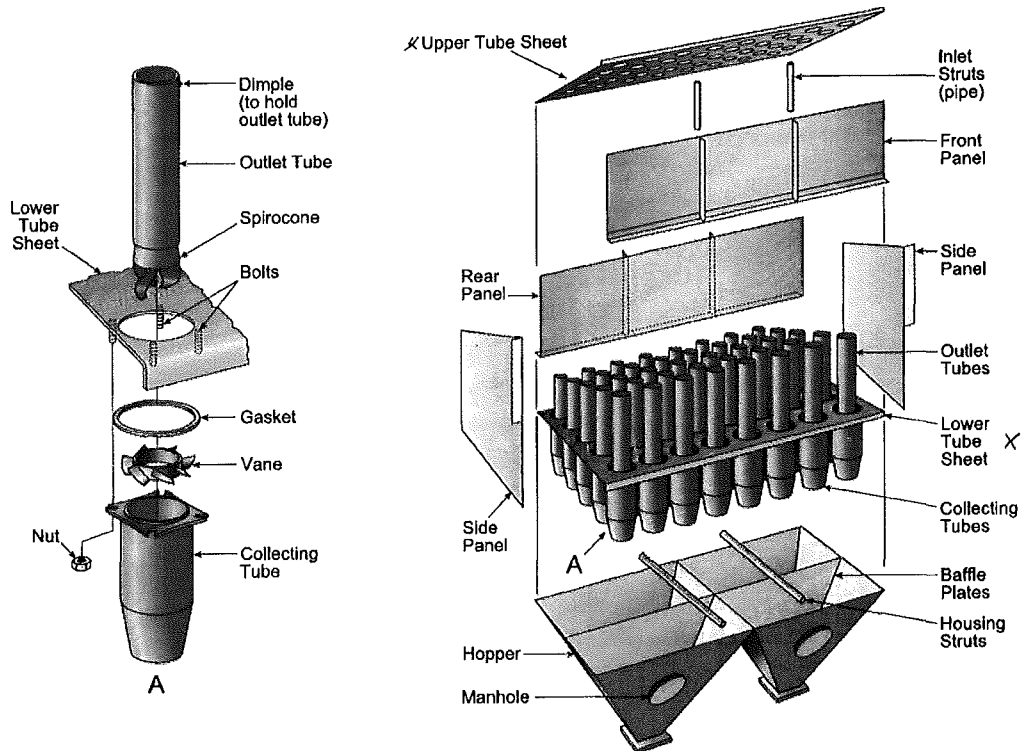


John S. Kirkpatrick, P.E.
Idaho Operations Environmental Manager

Attachments:

- 1). Multiclone_Exploded_View_&_Specs.pdf
- 2). Letter from Mr. Stephen Chiama of Babcock & Wilcox

Multiclone® Dust Collector Parts List

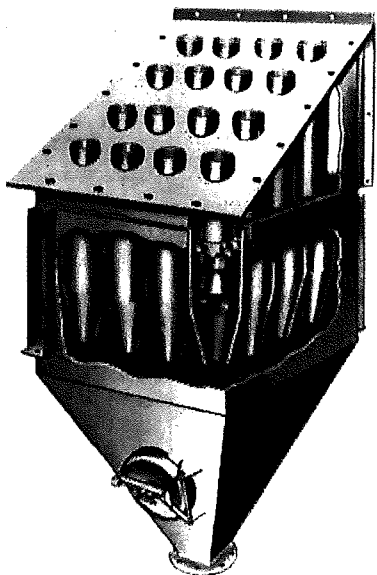


Babcock & Wilcox Multiclone® Dust Collector Replacement Parts List

Item No.	Description	9V (K-10.3) Standard	9V (K-10.3) NiHard	9V (K-12.3) Standard	9V (K-12.3) NiHard	9V (K-14.1) Standard	9V (K-14.1) NiHard	12V Standard	12V NiHard
1	Lower (Collecting) Tube Sheet	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2	Collecting Tube	6277255	6277256	6277255	6277256	6277255	6277256	6277260	6277270
3	Inlet Vane	6277257	6277259	6277260	6277261	6277262	6277263	6277264	6277266
4	Gasket	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)	(Superseded by 4A)
4A	Gasket Cement	6278483	6278483	6278483	6278483	6278483	6278483	6278483	6278483
5	Nut, Flange (5/8"-11) for 12V and special for 9V and 9VG	6277222	6277222	6277222	6277222	6277222	6277222	6277222	6277222
5A	Nut, Jamnut, Heavy Pattern (3/4"-10) for 9V and 9VG	6277221	6277221	6277221	6277221	6277221	6277221		
6	Nelson Stud (Bolt) (5/8"-11)							6277229	6277229
6A	Nelson Stud (Bolt) (3/4"-10)	6277225	6277225	6277225	6277225	6277225	6277225		
7	Spirocone	6277224	6277224	6277224	6277224	6277224	6277224	N/A	N/A
7A	Tricone	6278775	6278775	6278775	6278775	6278775	6278775	N/A	N/A
8	Outlet Tube	Various	Various	Various	Various	Various	Various	Various	Various
9	Tube Wrench, for 9VG/9VGR (for older units using 3/4" nuts)	6278640	6278640	6278640	6278640	6278640	6278640		
9A	Tube Wrench, for 9VG/9VGR (for newer units using 5/8" nuts)	N/A	N/A	N/A	N/A	N/A	N/A		
9B	Tube Wrench, for 12V/12VU (for all units using 5/8" nuts)							N/A	N/A
10	Wedge, Outlet Tube 9VG	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11	Collar, Outlet Tube Oval, 9VG	6277226	6277226	6277226	6277226	6277226	6277226	6277226	6277226
12	Upper (Outlet) Tube Sheet	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



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B&W PGG provides original equipment replacement parts for its Multiclone dust collector as well as its complete line of pollution control equipment.

The Multiclone® dust collector from Babcock & Wilcox Power Generation Group, Inc. is the simplest and most efficient multiple tube cyclonic collector available. It combines low maintenance, long collecting tube life, reliable operation and a modular design with the versatility to use in a variety of industrial or utility applications.

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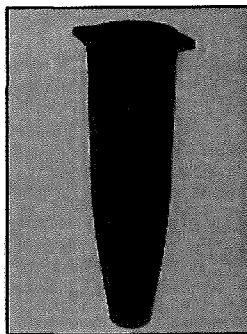
Phone: XXX.XXX.XXXX

Fax: XXX.XXX.XXXX

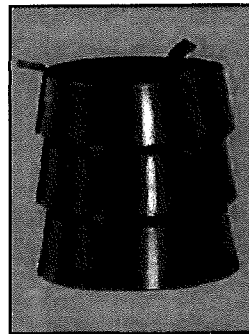
Email: jdoe@babcock.com



Spirocone energy recovery device for 9 in. Multiclone collectors.



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July 1, 2008

Mr. Bruce Wright
Corporate Environmental Programs Manager
Basic American Foods
415 West Collins Rd.
Blackfoot, ID 83221
208-785-8590

Dear Bruce,

As a follow-up to our phone discussion, I would like to confirm our recommendations;

The original purpose to add Spirocones to Multiclone® dust collectors was to reduce the pressure drop (ie. energy recovery device) for a given level of dust removal performance. In general, we can design for a lower predicted pressure drop without a significant change in dust emissions if we added the Spirocones.

In the specific case involving the Basic American Foods installation at Rexburg, ID; the Multiclone provided with Joy Job No. 81-120-06 was sized for 48,314 ACFM at 435 °F. For this installation in new condition, we originally predicted a pressure drop of 1.85" VWC (Vertical Water Column) with Spirocones installed. For the same design conditions, in as-new condition without Spirocones, we would predict that model and size Multiclone to have a pressure drop approximately 1" VWC higher than with Spirocones installed.

Over time we learned that some 12V version Multiclone dust collectors with Spirocones plugged. This was associated with high dust load situations, resulting in the collecting tubes becoming overloaded.

Additional issues involve basic wear and tear. Spirocones are installed by tack welding 3 small tabs to the outlet tubes. Those welds can break or, in high abrasion applications, erode through over time. The Spirocones can then fall out and plug their respective collecting tubes, resulting in a reduction of the aggregate dust removal efficiency. When that happens, as you describe now after 20+ years of operation, the dust removal efficiency will be negatively affected.

Joy-Western Precipitation (later Allen-Sherman-Hoff, later Babcock & Wilcox Power Generation Group) discontinued supplying Spirocones for new 12V version Multiclones to prevent selling our customers into these kinds of problems. As long as you have the necessary fan capacity, I recommend that you leave them out when you refurbish your Multiclone. Operating the unit without Spirocones should not reduce the collection efficiency of the Multiclone® dust collector significantly enough to measure in practical situations.

Very truly yours,
Babcock & Wilcox Power Generation Group

Stephen Chiama
Manager, APC Aftermarket Parts and Retrofits
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Email: sbchiama2@babcock.com